REMARKS/ARGUMENTS

By this amendment, Claims 21 and 30 are amended and no claims are added or cancelled. Hence, Claims 21-28 and 30-37 are pending in the application.

I. SOLE REJECTION

Claims 21-28 and 30-37 stand rejected under 35 U.S.C. § 103(a) for allegedly being anticipated over U.S. Patent Application 2002/0128904 issued to Carruthers et al. ("*Carruthers*").

A. CLAIM 21

Claim 21 recites:

> A method for determining which advertisements to include with electronic content delivered to users over a network, the method comprising the steps of:
> **after accepting a first contract with a first advertiser, accepting a second contract with a second advertiser;**
> **wherein the delivery obligations associated with the second contract are such that fulfillment of the second contract would likely prevent the delivery obligations associated with the first contract from being fulfilled;**
> storing data that indicates delivery criteria and delivery obligations for each of a plurality of contracts, wherein each contract is associated with an advertiser of a plurality of advertisers,
> wherein the plurality of contracts includes the first contract and the second contract;
> wherein the plurality of advertisers includes the first advertiser and the second advertiser;
> wherein each contract of the plurality of contracts is associated with a separate advertisement of a plurality of advertisements;
> after the plurality of contracts have been formed, receiving, from a user, a request to provide over said network a piece of electronic content that includes a slot for an advertisement;
> wherein the piece of electronic content has a subject;
> wherein the subject of the piece of electronic content is an attribute of the slot that is included in the piece of electronic content;
> **in response to receiving the request:**
> reading said data to determine delivery criteria associated with the plurality of contracts;

comparing slot attributes of said slot in the requested electronic content with delivery criteria of said plurality of contracts to determine a subset of said plurality of advertisements which qualify for inclusion in said slot, wherein the subject of the piece of electronic content is one of the slot attributes compared with the delivery criteria,

wherein both a first advertisement associated with the first contract and a second advertisement associated with the second contract qualify for inclusion in said slot,

wherein the second contract is associated with a behindness value that is currently greater than a behindness value associated with the first contract,

wherein the behindness value of each contract reflects how far behind a content provider is on satisfying the delivery obligations associated with each contract; and

from said subset of advertisements, selecting said first advertisement to include in the slot based, at least in part, on the first contract having been formed before the second contract;

inserting said first advertisement into the slot to create a modified piece of electronic content;

delivering, as a response to the request, the modified piece of electronic content to the user;

wherein the steps of receiving, reading, comparing, selecting, inserting, and delivering are performed on one or more computing devices. (emphasis added)

At least the above-bolded elements of Claim 21 are not disclosed, taught, or suggested by *Carruthers*.

As discussed in prior responses, both *Carruthers* and the invention recited in Claim 21 solve the problem with the most-behind-first approach, referred to herein as the "late-comer problem." (See paragraph 16 of the specification.) The way *Carruthers* solves the late-comer problem is fundamentally different than how the technique recited in Claim 21 solves the problem. Specifically, *Carruthers* avoids this problem of allowing late-comers to squeeze out prior orders by (a) predicting whether each later order can be filled without affecting prior orders, and (b) rejecting later orders that cannot be filled without affecting prior orders. In situations in which *Carruthers* rejects the orders of late-comers, *Carruthers* also suggests, to the late-comers, changes that can be made to their rejected orders that will make their orders

acceptable (see paragraphs 28 and 29). Thus, *Carruthers*' approach can be accurately called a pre-acceptance filtering approach.

The pre-acceptance filtering approach works great in situations where it is possible to estimate, with a reasonable degree of accuracy, which people will be sending requests to a server, and how frequently each of them will be sending requests to a server. *Carruthers*' approach works well for the environment envisioned by *Carruthers* because in that environment advertisements are sent to users that are logged into the system **regardless of the content that users are requesting** and viewing. **In contrast**, Claim 21 recites that the advertisements are selected for a user depends on **the subject of the content that the user is requesting**.

Since *Carruthers*' approach works well in the context anticipated by *Carruthers*, there would be no reason to combine *Carruthers*' pre-acceptance filtering approach with an entirely different approach (e.g., the approach described in Claim 21). In other words, because *Carruthers* has already provided a solution to the late-comer problem, it would not make sense to say that one would be motivated to modify *Carruthers* to also provide a completely different solution to the same problem. Further, even if one were somehow motivated to add a second late-comer problem solution to *Carruthers*, there is no reason to believe that they would do so by independently inventing the innovative technique recited in Claim 21.

As shall be pointed out hereafter, there are several express limitations in Claim 21 that are not satisfied by *Carruthers*. Many of the limitations missing from *Carruthers* directly relate to the solution (provided by the method of Claim 21) to the late-comer problem that is fundamentally different from *Carruthers*' solution to the late-comer problem. Because there would be no reason to modify *Carruthers* to provide a different solution to the late-comer

problem already solved by *Carruthers*, *Carruthers* cannot be said to even suggest a modified system that includes these unsatisfied limitations.

1. Carruthers *fails to teach or suggest accepting the recited second contract after accepting the recited first contract*

Claim 21 recites that a second contract is accepted after accepting the first contract even though "the delivery obligations associated with the second contract are such that fulfillment of the second contract would likely prevent the delivery obligations associated with the first contract from being fulfilled." In contrast, *Carruthers*' system determines, before accepting an ad campaign (i.e., the alleged contract), whether an adequate supply is expected for the proposed ad campaign. If the supply is not large enough, then *Carruthers*' Capacity Forecaster 52 assists the advertiser in modifying the campaign's requirements or constraints to increase the likelihood of the campaign's success (see paragraphs 28 and 30). Thus, by ensuring that the campaign's goals can be met before accepting the campaign (see paragraph 29), the goals of each previously-accepted ad campaign can still be met.

The Examiner has pointed out that, if combined with a first-come-first-served modification, *Carruthers*' estimator could be modified in a way as to not reject contracts that adversely affect previous contracts. Such a modification runs **directly contrary** to the **entire purpose** of *Carruthers*' estimator, which is to reject (or at least induce to modify) contracts whose fulfillment would impede fulfillment of prior contracts.

The Office Action, on page 2, asserts, "A showing of any ad by an advertiser is taken to be adversely affecting others; the adverse affect is that such others don't get their ad at that time." Although Claim 21 no longer recites the "adversely affected" language, what is being adversely affected is the level of service an advertiser receives under a contract. Just because advertisement A was not selected for inclusion in a slot does **not** mean the level of service of

the corresponding advertiser was adversely affected. As long as the delivery obligations of the associated contract are fulfilled, advertisement A does not have to be selected every time advertisement A is an option for inclusion in a slot.

The Office Action, on page 2, further asserts, "Late-arriving advertisers would[, under a hypothetical approach where *Carruthers*' estimator also accepts contracts whose delivery obligations wouldn't be fulfilled,] only be served if ad inventory (available slots) was plentiful enough to fully serve the advertisers who came before them. This is consistent with Carruthers et al's disclosure that early adopters will be accommodated, yet late adopters will not." The first statement, as explained above, completely defeats the purpose of *Carruther*'s estimator and is completely contrary to *Carruthers*' teachings. With respect to the second statement, "early adopters" are only those advertisers that are able contract with the content provider, while "late adopters" are those whose proposed delivery obligations are estimated to be too high, and thus not "fulfillable." A contract with a "late adopter" is **not** accepted unless the late adopter is willing to accept lower delivery obligations to a point where *Carruthers*' estimator determines that the lower delivery obligations can be fulfilled.

2. Carruthers *fails to teach or suggest that a first ad is selected over a second ad despite the fact that the contract associated with the second ad has a greater behindness value than the contract associated with the first ad*

According to Claim 21, a first advertisement is selected based on the fact that a first contract (associated with the first advertisement) was formed before a second contract, <u>despite the fact that the second contract has a behindness value that is greater than the first contract</u>. *Carruthers* fails to teach or suggest this feature of Claim 21. Instead, *Carruthers* teaches a system where, once contracts are formed, the order in which advertisements are displayed is

based **only** on whether the daily goals (or objectives) of each campaign are reached (see paragraphs 32, 34, and 35).

Because *Carruthers*' system already performs pre-acceptance filtering to solve the late-comer problem, *Carruthers*' system can safely use a behindness measure to select among ads, when some ads fall behind. There would be no reason for *Carruthers* to penalize later contracts, because *Carruthers* has already made sure that those later contracts will not likely prevent the delivery obligations associated with any pre-existing contracts from being fulfilled.

In the "Response to Arguments" section, the present Office Action asserts that the approach of Claim 21 is similar to how passengers are selected for a flight where the airline employs "overbooking." "Overbooking," in the airline industry, involves the sale of a number of reservations for a particular flight where the number of reservations exceeds the number of seats on the plane. The passengers that arrive at the appropriate gate in the airport first secure their right to a seat, while later-arriving passengers might not have a seat on the airplane. However, the airline overbooking approach is very **unlike** the approach of Claim 21. For example, there is **no behindness value associated with a passenger**, like there is associated with a contract. It does not make sense for a passenger to be associated with a behindness value since the only "delivery obligations" associated with a flight reservation is to fly the passenger from one airport to another at a particular date and time.

Another significant dissimilarity is that a passenger is able to obtain an available seat on a plane based solely on **when the passenger arrives at the gate**. In contrast, Claim 21 recites the selection of an advertisement is based, at least in part, on **when the contract was formed**. Thus, in order for the airline passenger scenario to be similar to this limitation of Claim 21, an airline would have to take into account when passengers' tickets were **purchased** when

determining which passengers are allowed to board the plane. This is not the case for airlines that "overbook."

3. Carruthers *fails to teach or suggest that the time of contract formation, relative to other contract formations, is taken into account when determining which advertisement to place in a slot*

Claim 21 recites "from said subset of advertisements, selecting said first advertisement to include in the slot based, at least in part, on the first contract having been formed before the second contract." In contrast, not only does *Carruthers* fail to teach or suggest including an advertisement in a slot (as explained in more detail below), *Carruthers* fails to teach or suggest that the time of when a contract was formed, relative to another contract, is taken into account when determining which advertisement to select. Once *Carruthers* has formed two contracts, when the contracts were formed is irrelevant to the ad selection process. Indeed, there is no need for *Carruthers* to base its advertisement selection on when a contract was formed, because *Carrutthers*' Capacity Forecaster 52 has already determined that the agreed upon objectives of each accepted ad campaign are achievable.

Furthermore, the placement of a particular advertisement in *Carruthers* is based on what position in a list of advertisements appears and whether the user is still logged on when it is time to display the particular advertisement. Thus, the step of selecting an advertisement in *Carruthers* is **not** in response to a user request for a particular piece of electronic content, as Claim 21 requires.

4. Carruthers *fails to teach or suggest that electronic content includes a slot for an advertisement*

Claim 21 recites "after the plurality of contracts have been formed, receiving a request to provide over said network a piece of electronic content that includes a slot for an advertisement." *Carruthers* fails to teach or suggest that electronic content includes a slot for

an advertisement. On page 3, the Office Action equates the recited "slot" with *Carruthers*' "surplus screen real estate." This is clearly incorrect. Surplus screen real estate refers to a user's (or subscriber's) viewing space, **not** to the **electronic content that the user is requesting**.

In the "Response to Arguments" section, the present Office Action asserts, "It is precisely the content which include indications (i.e. tags at the bottom, top, etc., of a page) where to place this advertising banner." It is unclear what this statement means since *Carruthers* never uses the terms "tag," "bottom" or "top." Further, when *Carruthers* refers to "content," such content are the advertisements. Therefore, the above allegation is another way of saying that the content includes indications of where to place content, which clearly does not make sense.

On page 3, the Office Action asserts that "requested web pages represent advertising opportunities having surplus screen real estate (slots where banners are to be inserted – i.e. at the top or bottom, etc., of the page or where else the page designer desires the include advertising)…." It is respectfully noted (again) that the **content that the user request includes slots**. Reference to "surplus screen real estate" in *Carruthers* does <u>not</u> refer to the content that a user requests, but rather refers to the user's display in general.

5. Carruthers *fails to teach or suggest the comparing step of Claim 21*

Claim 21 explicitly requires:

> comparing slot attributes of said slot in the requested electronic content with delivery criteria of said plurality of contracts to determine a subset of said plurality of advertisements which qualify for inclusion in said slot, wherein the subject of the piece of electronic content is one of the slot attributes compared with the delivery criteria….

In contrast, *Carruthers*' system matches (a) the profile of a user that logs in, to (b) the profiles of advertisements in *Carruthers*' master list of advertisements (see paragraph 38). This user-specific filtering of the master list occurs **when a user logs onto the system**. Thus, at the time of log on, the sequence of advertisements that the user will see is determined. That sequence stays in effect **regardless of the subject of the content the user requests**.

As pointed out in the in-person interview and the present Office Action, it is possible for a user's profile to be updated during a session to reflect the subject of the content that the user is requesting. However, even if such on-the-fly profile modification were to happen, the sequence of the advertisements in the user's current session would not change. Instead, the next time the user logs on, a new user-specific list of advertisements would be constructed based on the revised profile. Thus, while the advertisements *Carruthers* sees may reflect the subject of what a user requested **in previous sessions**, it never reflects the subject matter of what the user is currently requesting, much less the subject matter of **the document into which the advertisement is actually inserted**.

In the "Response to Arguments" section, the present Office Action asserts "it would have been obvious…to have inspected the user profile or inspected the current page at any time or re-ordered the ad queue at any time, including for each advertising opportunity so that an ad can be operably targeted to the current page content as desired by the incorporated material." Even if it was obvious to provide advertisements that are related in subject matter to the content a user is currently viewing, the approach of *Carruthers* does **not** allow for this to occur because the web content that a user specifically requests does **not include slots**. That is why *Carruthers* discloses an approach where ads are determined for a user when the user logs in, **not** when the user requests specific web content. Thus, in *Carruthers*, there is a correspondence between advertisements and users while, in Claim 21, there is a correspondence between advertisements

and specific electronic data (e.g., web pages) that share similar subject matter as the advertisements.

Further, it would not have been obvious to modify *Carruthers*' approach in this way. If advertisements were targeted to the specific content a user requested, then *Carruthers*' estimator would have to change drastically by speculating which content users might be requesting in the future. One of ordinary skill in the art would appreciate that gradual changes in users' profiles would not significantly alter *Carruthers*' advertisement delivery system's ability to fulfill the delivery obligations of each accepted contract. Therefore, it would **not** have been obvious to modify *Carruthers*' system to select advertisements based primarily on the requested content.

6. Carruthers *fails to teach or suggest that slot attributes include an attribute that corresponds to the subject of the electronic content*

Claim 21 further recites "wherein the slot attributes include at least one attribute that corresponds to the subject of the electronic content." *Carruthers* fails to teach or suggest this feature of Claim 21. As discussed above, according to *Carruthers*, an advertisement is determined eligible for a particular user by matching the profile of the particular user with the profiles of advertisements in a prioritized list generated by an inventory manager 51. As made clear above, *Carruthers* fails to even suggest that electronic content has slots into which advertisements are included. Further, as discussed in the in-person interview, even though the profile of a user in *Carruthers* may eventually be updated to include the fact that the user visited certain web pages, the list of advertisements for the user is generated once when the user logs in to the system. Even if the user's profile is updated immediately upon visiting a website, the list of advertisements is still based on the user's profile as it existed when the user logged in.

7. Carruthers *fails to teach or suggest that the inserting and delivering steps of Claim 21*

Claim 21 recites that the first advertisement is inserted into the slot to create a modified piece of electronic content. Because the electronic content in *Carruthers*' system does not include slots, it naturally follows that *Carruthers*' system does **not** (a) create modified pieces of electronic content by inserting ads into those slots and (b) deliver the modified pieces of electronic content to the user.

B. CLAIM 30

Claim 30 is an independent claim that recites the limitations of Claim 21 that were discussed above. Claim 30 is therefore patentable over *Carruthers* for at least the same reasons given above for the claim on which it depends.

C. CLAIMS 22-28 AND 31-37

Claims 22-28 and 31-37 are dependent claims, each of which depends (directly or indirectly) on one of Claims 21 or 30. Each of Claims 22-28 and 31-37 is therefore patentable over *Carruthers* for at least the same reasons given above for Claim 21 or Claim 30.

II. CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Please charge any shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

/DanielDLedesma#57181/
Daniel D. Ledesma
Reg. No. 57,181

Date: September 23, 2009
2055 Gateway Place, Suite 550
San Jose, CA 95110-1083
Telephone: (408) 414-1080 ext. 229
Facsimile: (408) 414-1076